



HOW REVISIONS TO IDAHO'S WELL CONSTRUCTION STANDARD WILL PROTECT GROUNDWATER RESOURCES

PREPARED FOR AND SUBMITTED TO

Idaho Department of Water Resources
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EXECUTIVE SUMMARY

Idaho Department of Water Resources [IDWR] retained Rocky Mountain EnvironmentalSM (RMEA) to consider possible revisions to clarify Idaho's Well Constructions Standards [IDAPA 37.03.09], to strengthen enforcement, and to protect Idaho's groundwater. Rocky Mountain EnvironmentalSM solicited recommendations to revise the standard from members of the Idaho legislature, Idaho Water Resources Board, Idaho's well drillers, Professional Geologists, Professional Engineers, and scientists employed by IDWR, Idaho Department of Environmental Quality (IDEQ), and District Health Departments and in private practice, Idaho Association of Cities, and Idaho Rural Water Users.

Based on research and discussions with these groups, Rocky Mountain EnvironmentalSM believes that the well construction standard can and should be revised. Specifically,

- *Well Seals.* The seal around the outside of the well casing prevents both downward flow of surface water and flow up and down the outside of the casing between aquifers. Any revision to the standard for well seals will be challenging, because seals are expensive to install. Some stakeholders are adamant that thicker and deeper seals are necessary to protect groundwater. On the other hand, many drillers believe the current standard and the methods to seal wells are adequate to protect groundwater. Regardless, any revisions to the standard should allow drillers to apply their professional judgement during well installation.
- *Well Plugging.* Across Idaho, there are innumerable wells that are unused and in disrepair. These orphan wells are conduits for contamination that threatens Idaho's groundwater. Almost all stakeholders agree a solution is needed and that Idaho's drillers have an critical role in identifying and plugging orphan wells. Everyone, however, recognizes that finding the funding to pay for properly plugging unused or damaged wells will be the challenge.
- *Well Disinfection.* An increasing number of wells in Idaho contain bacteria, and a majority of stakeholders believed that disinfection should be required at the completion of well drilling and whenever pumps are installed or replaced. Because disinfection is clearly beneficial, inexpensive, and easily accomplished, the revised standard should require disinfection.

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- *Clarity and Enforceability.* As IDAPA 37.03.09 is revised, particular care should be taken to clearly outline the roles and responsibilities of well drillers [and well designers when different], well owners, and other individuals, such as pump installers. Clearly outlining the responsibility of each will make enforcement easier. Several areas were identified as causing confusion, such as inclusion by reference to District Health Department or IDEQ rules. A revision should define the different types of wells, such as domestic, monitor, irrigation, or public water system wells, and the requirements that should apply to each type.

We also identified *well siting* as a critical issue, but it may be resolved without revising IDAPA 37.03.09. Currently, conflicts arise when well drillers and septic installers try to fit both wells and septic systems on small lots, lots with limited soil cover, or too close to property boundaries or rights-of-way. Now, the standard only refers to set-back requirement in other rules, but provides no mechanism to resolve siting conflicts or to assign responsibility for resolution. However, stakeholders are committed to develop working solutions. We believe that the Department should implement a pilot program to develop cooperative management strategies to site wells and septic tanks. Working together, Idaho's well drillers and the professionals employed at IDWR, Idaho Department of Environmental Quality [IDEQ], and District Health Departments can successfully resolve this issue.

As Rocky Mountain EnvironmentalSM traveled across Idaho, we realized that stakeholders are committed to improving the well construction standards. However, the stakeholder meetings described herein were held in separate forums where stakeholders have largely heard input from people who share the same or similar perspectives. Even in these forums, stakeholders are not unanimous, and no agreement was reached on specific revisions to IDAPA 37.03.09.

In the next step, stakeholders with different perspectives must come together to develop specific language to revise IDAPA 37.03.09. A list of volunteers from a variety of stakeholders willing to participate in negotiated rule-making was assembled. We firmly believe that, through negotiated rule-making, Idaho Department of Water Resources [IDWR] can successfully revise IDAPA 37.03.09 to ensure safe, reliable groundwater.